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Our Case No. 8285/487

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:		
	Brad Allen Medford et al	
Serial No.:	10/037,453	Examiner: Rekstad, Erick J.
Filing Date:	December 20, 2001	Group Art Unit No.: 2613
For:	Multilevel Data Compression Using a Single Compression Engine	

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandra, VA 22313-1450

Dear Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal

The review is requested for the reasons stated on the attached sheets. No more than five (5) pages are provided.

REMARKS

I. Introduction

Claims 1-22 are pending on the application. In the Office Action dated April 19, 2006, the Examiner rejected claims 1-6, 8-13, 15-20, and 22 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,778,607 ("Zaccarin") in view of U.S. Pat. No. 5,253,055 ("Civanlar") and U.S. Pat. No. 6,335,760 ("Sato"). Further, claims 7, 14, and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zaccarin in view of Civanlar, Sato, and U.S. Pat. No. 5,604,494 ("Murakami").

II. It Is Improper to Combine Sato and Zaccarin

As explained in detail in Applicants' response to the Office Action dated November 28, 2005, it is improper to combine Sato and Zaccarin due to the fact Sato and Zaccarin teach away from their combination. Sato and Zaccarin teach away from each other due to the fact Sato teaches an ***efficient*** method to produce a ***single signal*** with a resolution ***dependant on a single display*** in communication with the Sato system where Zaccarin teaches a method for encoding a signal at different bit rates ***independent of the multiple displays*** in communication with the Zaccarin system.

The object of Sato is "to provide an image reproduction device in which a resolution or gradation of an image can be changed in accordance with an indicated performance of a display." (Col. 1, lines 35-38.) Only one signal is produced in Sato to permit "an original high resolution image to be efficiently indicated on a variety of displays, of varying inherent resolutions. . .." (Col. 8, lines 55-57.) Altering Sato to provide varying bit rates to a plurality of users independent of a display in communication with the Sato system teaches away from the efficient method of Sato.

Further, it is improper to modify Sato in a manner that renders Sato unsatisfactory for its intended purpose or changes its principle of operation. *See* MPEP §§ 2143.01 and 2145. The object of Sato is "to provide an image reproduction device in which a resolution or gradation of an image can be changed in accordance with an indicated performance of a display." (Col. 1, lines 35-38.) Modifying Sato to produce multiple image signals independent of a display in communication with Sato defeats the purpose of Sato and would render components of Sato meaningless. For example,

Sato discloses a resolution recognition unit. Sato increments a low-resolution image signal to a high-resolution image signal until the resolution of the image signal is equal to or greater than the inherent resolution of a display as determined by the resolution recognition unit. If Sato were modified to always provide varying bitrates to a plurality of users, there would be no purpose for the resolution recognition unit.

Due to the fact Sato and Zaccarin teach away from their combination, and due to the fact the proposed modification to Sato would render Sato unsatisfactory for its intended purpose or change the principle operation of Sato, it is improper to combine Sato and Zaccarin.

III. The Proposed Combinations Do Not Render Claim 1 Unpatentable

Even if Sato and Zaccarin are improperly combined, the proposed combinations of Zaccarin, Civanlar, Sato, and Murakami do not render independent claim 1 unpatentable. Claim 1 recites a method wherein a single compression engine is operable to provide a first and second DCT-encoded signal at substantially the same time. The first DCT-encoded signal uses at most t coefficient bits to represent each of a plurality of DCT coefficients and the second DCT-encoded signal uses at most u coefficient bits, wherein u is less than t, to represent each of the plurality of DCT coefficients. Zaccarin, Civanlar, Sato, and Murakami all fail to disclose at least a single compression engine operable to provide first and second DCT-encoded signals, having the properties recited in claim 1, at substantially the same time.

As discussed above, Sato teaches an efficient method to produce a single image signal with a resolution dependant on a single display in communication with the Sato system. The Sato system begins with a low-resolution signal and increments the resolution to a high-resolution signal. The Sato system does not produce image signals of varying resolutions at one time. The Examiner relies on Figures 3 and 4 of Zacarrin for providing a plurality of encoded video streams. However, Zacarrin does not resolve how the Sato system that is limited to producing one image signal at a time can be modified to provide multiple signals at one time providing different resolutions. Presumably, to produce multiple signals at one time providing different resolution, it

would be necessary to combine multiple Sato systems, resulting in ***multiple compression engines***.

In the Office Action dated April 19, 2006, the Examiner added Civanlar to the proposed combination of Sato and Zaccarin in an attempt to resolve how the Sato system that is limited to producing one image signal at a time can be modified to provide multiple signals at one time providing different resolutions. In particular, the Examiner cites col. 1, lines 29-50 of Civanlar. The cited portion of Civanlar discloses a low-complexity method of scalable video encoding in which ***a single video signal is transmitted to multiple receivers*** which decode images of varying resolutions from that signal depending upon the particular signal decoding scheme employed by the receivers. Claim 1 recites a **single compression engine** providing **multiple signals, a first DCT-encoded signal and a second DCT-encoded signal,** at substantially the same time. Civanlar does not resolve how the Sato system that is limited to providing one image signal at a time can be modified to **provide multiple signals** at one time providing different resolutions as recited in claim 1.

Like Civanlar, the addition of Murakami does not resolve how the Sato system that is limited to providing one image signal at a time can be modified to provide multiple signals at one time providing different resolutions as recited in claim 1. Murakami is directed to an encoding/decoding apparatus that alleviates errors after repeatedly encoding/decoding a digital signal. Murakami does not disclose or suggest providing a plurality of levels of compression or reconcile how Sato could be modified such that a single compression engine may provide multiple image signals at different resolutions at one time.

Due to the fact Sato discloses a compression engine that may only provide an image signal at one resolution at any time, and Zaccarin, Civanlar, and Murakami all fail to disclose how Sato could be modified such that a single compression engine may provide **multiple image signals at different resolutions at one time**, the proposed combinations of Zaccarin, Civanlar, Sato, and Murakami as contemplated by the Examiner necessarily do not render independent claim 1, or any claim that depends on the claim 1, unpatentable.

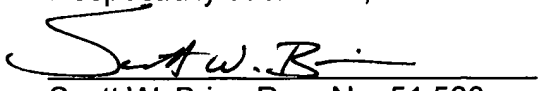
IV. The Proposed Combinations Do Not Render Claim 8 Unpatentable

Claim 8 recites a computer-usable medium having computer program code to direct a single compression engine to provide a first and second DCT-encoded signal at substantially the same time. The first DCT-encoded signal uses at most t coefficient bits to represent each of a plurality of DCT coefficients and the second DCT-encoded signal uses at most u coefficient bits, wherein u is less than t, to represent each of the plurality of DCT coefficients. As discussed above, Zaccarin, Civanlar, Sato, and Murakami all fail to disclose at least a single compression engine operable to provide first and second DCT-encoded signals, having the properties recited in claim 8, at substantially the same time. For at least this reason, the proposed combinations of Zaccarin, Civanlar, Sato, and Murakami as contemplated by the Examiner necessarily do not render claim independent 8, or any claim that depends on claim 8, unpatentable.

V. The Proposed Combinations Do Not Render Claim 15 Unpatentable

Claim 15 recites a single compression engine operable to provide a first and second DCT-encoded signal at substantially the same time. The first DCT-encoded signal uses at most t coefficient bits to represent each of a plurality of DCT coefficients and the second DCT-encoded signal uses at most u coefficient bits, wherein u is less than t, to represent each of the plurality of DCT coefficients. As discussed above, Zaccarin, Civanlar, Sato, and Murakami all fail to disclose at least a single compression engine operable to provide first and second DCT-encoded signals, having the properties recited in claim 15, at substantially the same time. For at least this reason, the proposed combinations of Zaccarin, Civanlar, Sato, and Murakami as contemplated by the Examiner necessarily do not render independent claim 15, or any claim that depends on claim 15, unpatentable.

Respectfully submitted,



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